Washington Aqueduct Proposed Residuals Management Process – Emerging Issues

November 16, 2004

Outline

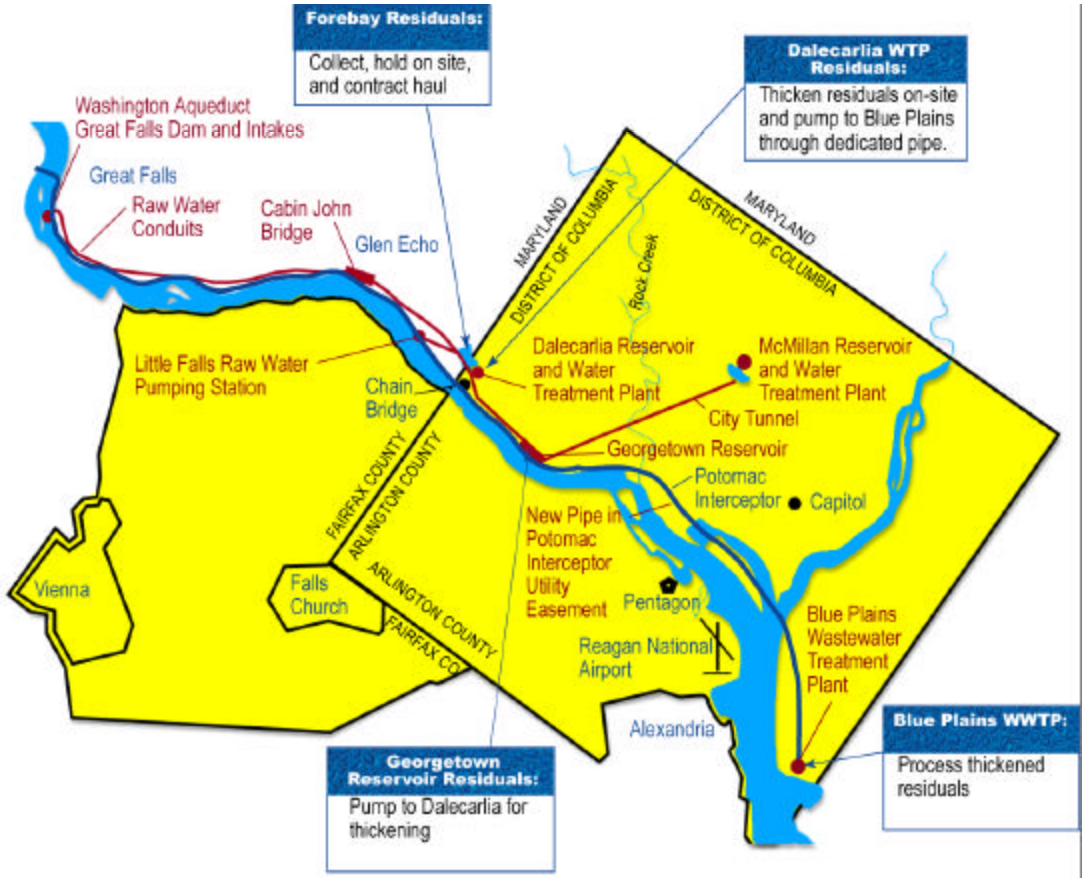
- **Review of Emerging Issues for Alternative A [Monofill]**
- **Alternative C [Blue Plains Pipeline]**
  - Likely Significant Impacts
  - Recent Developments
- **Review of Emerging Issues for Alternative B [Dewater at Dalecarlia and Truck]**
  - Public Concerns/Discussion

Review of Emerging Issues for Alternative A [Monofill]

- **The likely significant impacts related to the monofill include: Visual, Land Use, Hazardous Substances, and Implementation uncertainty**
- **Spring Valley Schedule and FFCA deadlines preclude Alternative A from being selected.**

The Blue Plains alternative (Alternative C) would mean building a new 12 mile pipeline from the Dalecarlia Water Treatment Plant to the Blue Plains Advanced Wastewater Treatment Plant

- **This alternative eliminates trucking of residuals from the Dalecarlia WTP**
- **Residuals will still be trucked from Blue Plains**



Work to date is revealing that there will be significant impacts associated with the pipeline corridor

- **Historic and archaeological resources**
- **Hazardous materials**
- **Sensitive land uses**
- **Economic impacts associated with high construction cost**
- **Securing right-of-way permits**
- **Large number of local and Federal Agencies involved complicates and extends the approval process**
- **Implementation uncertainty**

Recent Developments

- **DC WASA has formally indicated that space is <u>not available</u> at Blue Plains WWTP for Residuals Processing Facilities**
- **Additional wastewater treatment facilities are needed to provide additional nutrient removal to meet Chesapeake Bay water quality goals**
- **Provide additional wastewater treatment of combined sewer overflow (CSO) flows**

Review of Emerging Issues for Alternative B [Dewater at Dalecarlia and Truck]

- **Truck traffic will not significantly impact existing road capacity (level of service) on truck routes.**
- **Licensed disposal ensures environmental regulations will be met**

Review of Emerging Issues for Alternative B [Dewater at Dalecarlia and Truck]

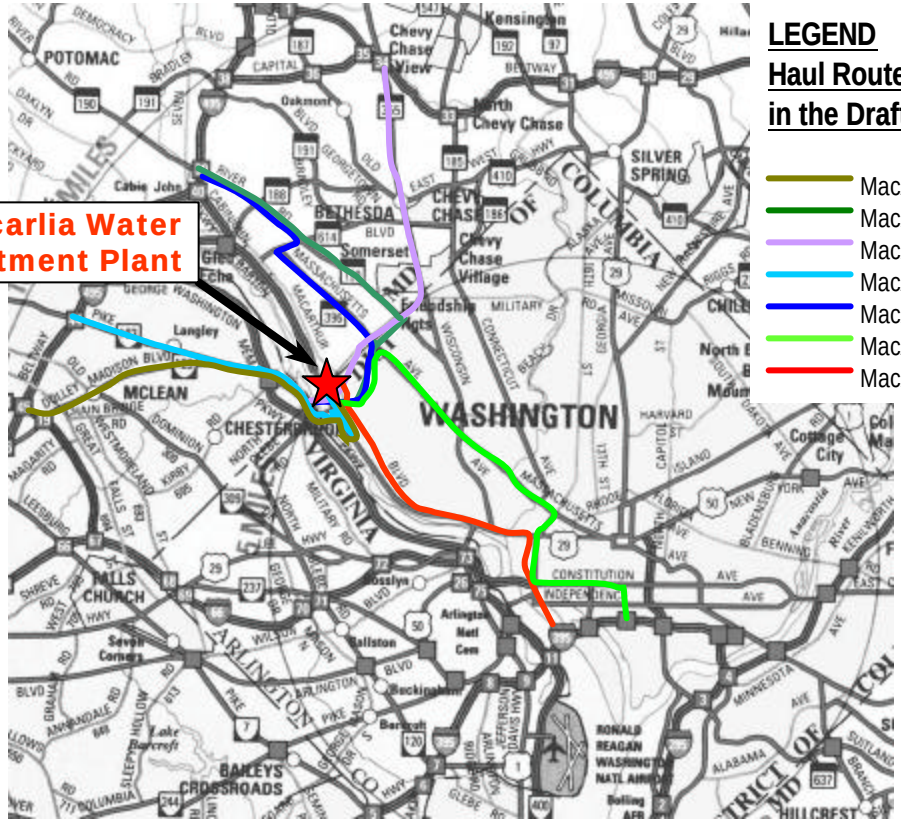
- **Public Concerns**
  - Truck traffic
  - Odor
  - Noise
  - Light pollution
  - Hours of facility operation & trucking
  - Visual impact from new building

Public Concerns with Alternative B [Dewater at Dalecarlia and Truck]

- **Trucks**
  - Average 9 Loads/Workday
  - Plant will be designed to cover extreme conditions which would result in additional loads

Daily Average (M - F) Number of Loads			
20 Ton Trucks		10 Ton Trucks	
Current	20 Year Projection	Current	20 Year Projection
9	10	16	20

Seven Haul Routes Evaluated for Potential Impacts



LEGEND

Haul Routes that will be Evaluated in the Draft EIS

- MacArthur-Arizona-Chain Bridge-Dolley Madison-I 495
- MacArthur-Dalecarlia-Western-River-I 495
- MacArthur-Dalecarlia-Western-Wisconsin-I 495
- MacArthur-Arizona-Chain Bridge-Georgetown Pike-I 495
- MacArthur-Dalecarlia-Massachusetts-Goldsboro-River-I 495
- MacArthur-Dalecarlia-Massachusetts-Constitution-I 395
- MacArthur-Canal-Whitehurst-23rd St-I 395

SCHEMATIC
NOT TO SCALE

- Understand haul routes under a range of conditions
- Provide operational flexibility and vehicle dispersion

Haul routes evaluated for roadway capacity, operational efficiency, and safety

- **Performed mechanical and continuous traffic counts (passenger vehicles, buses, light trucks, heavy trucks)**
- **Identified regional traffic growth trends (average daily traffic data from DDOT, MD State Highway admin, VA DOT)**
- **Evaluated planned/proposed developments**
- **Evaluated programmed roadway improvements**
- **Compared residuals trucks with reservoir dredging operation**

Basic information establishes the basis for determining impacts

- **Local area roadway network operates within acceptable Level of Service standards for City's Department of Transportation**
  - capacity constraint during morning peak hour at unsignalized Loughboro Road/Dalecarlia Parkway intersection
- **Planned development, pedestrian and security concerns exist along some routes**

Hauling operations have negligible impact on existing and future traffic conditions on all haul routes

- **Residuals truck volume is consistent with existing road capacity along the haul routes**
- **Planned development and security concerns along some routes may force them to be dropped from the proposed action**
- **Best management practices can further limit truck loads during morning peak hour**
- **Limit truck parking or standing along adjacent roadways**

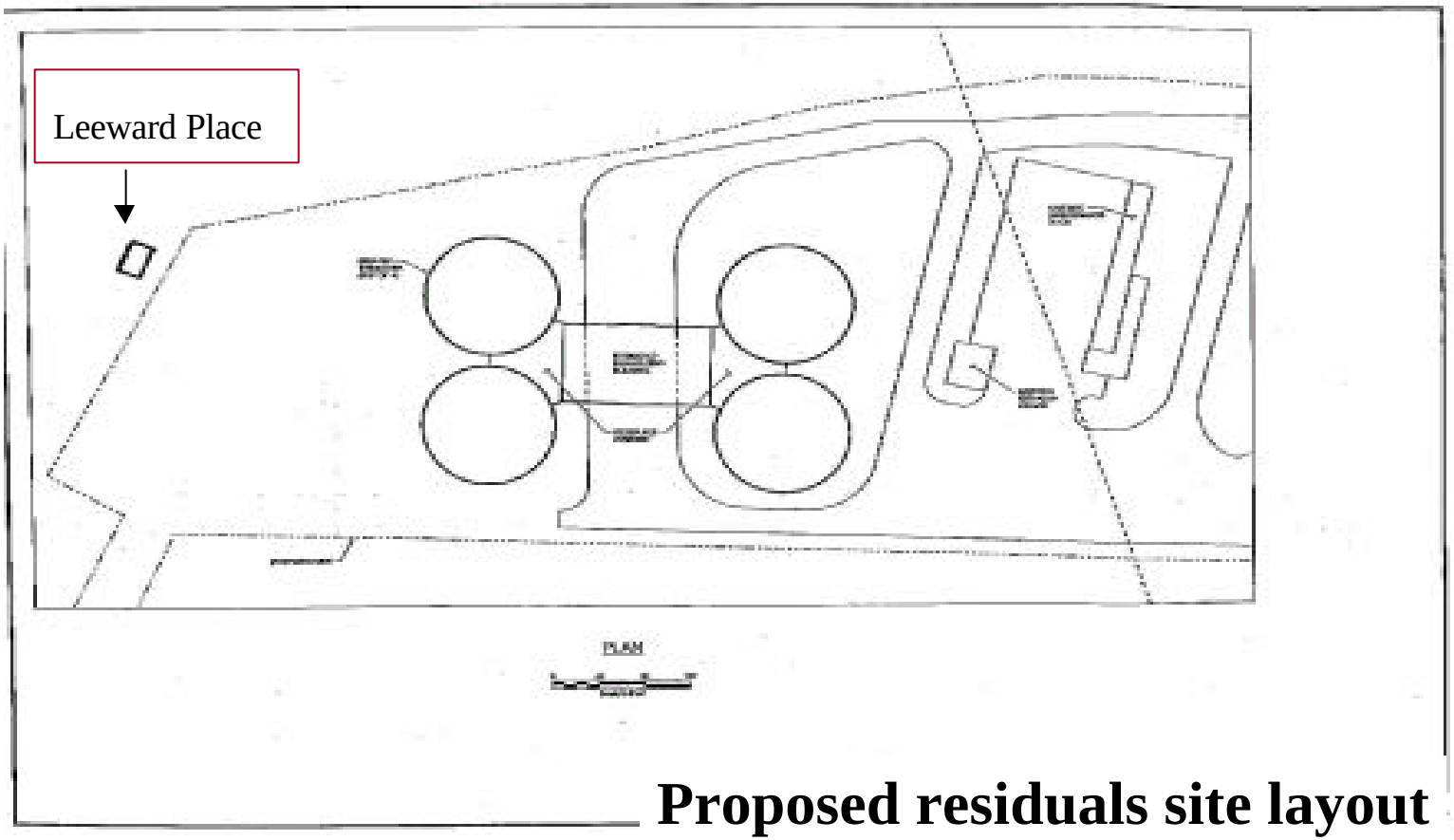
Public Concerns with Alternative B [Dewater at Dalecarlia and Truck]

- **Odor**
  - No odor is expected-- including associated with trucks
  - Samples of Water Treatment Residuals
- **Noise**
  - Trucks will not operate during the quiet times in the neighborhood
  - Building design can prevent noise from impacted neighbors (85dBA inside, 60dBA at door)
    - 10dBA change from background is considered an impact
    - Facility will result in 0.4 change in dBA from background

Public Concerns with Alternative B [Dewater at Dalecarlia and Truck]

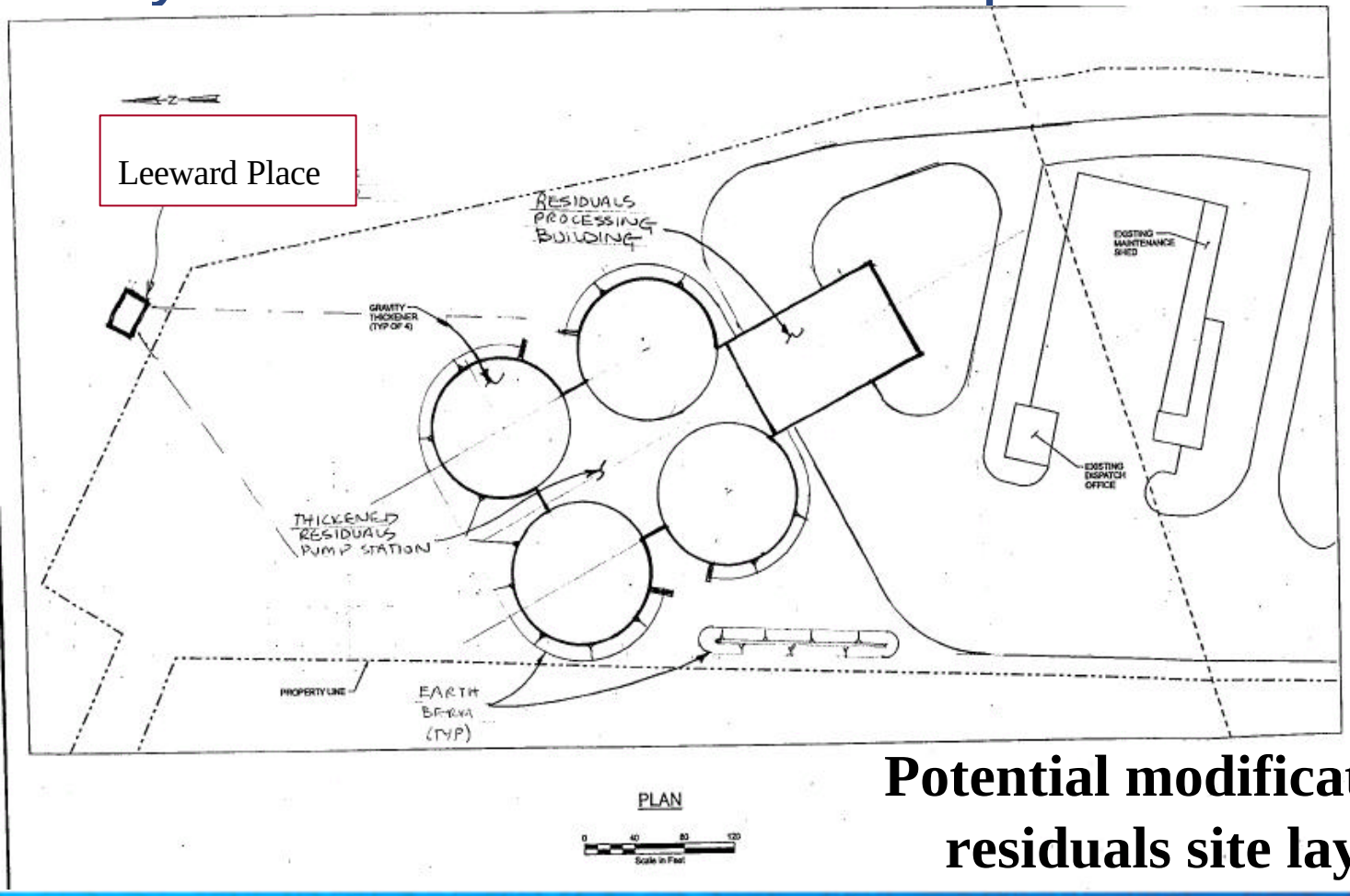
- **Light pollution**
  - Light is not expected to be emitted from building
  - Security lighting around facilities can be designed to minimize impacts on neighbors
- **Visual**
  - Location on site
  - Building height

Recent conversations with Leeward Place neighbors suggests modifying residuals site layout to minimize visual impacts



Proposed residuals site layout

Recent conversations with Leeward Place neighbors suggests modifying residuals site layout to minimize visual impacts



Potential modification to residuals site layout

Additional Leeward Place comments focus on ways to reduce building mass

- **Partially bury first floor (lower entire building)**
- **Modify building roof shape**
- **Lower roof height**